



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,422	08/19/2003	Katsuaki Tanaka	P 0305422 H7959US	4553

7590 07/09/2010
Pillsbury Winthrop LLP
Intellectual Property Group
Suite 2800
725 South Figueroa Street
Los Angeles, CA 90017-5406

EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
----------	--------------

2627

MAIL DATE	DELIVERY MODE
-----------	---------------

07/09/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/643,422	Applicant(s) TANAKA ET AL.	
	Examiner Kim-Kwok CHU	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on March 2, 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 13-16 and 43-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-16 and 43-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2627

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 13-16 and 43-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, lines 9 and 11, the steps of designating and performing "DSP program parameters" on a digital signal processor is vague. First, it is not clear whether or not the claimed "rule table" (line 7) is the "DSP program parameters". Second, since the relationship between claimed "rule table" and the claimed "DSP program parameters" is not clear, the origin of the "DSP program parameters" becomes not clear. In other words, it is not clear whether the "DSP program parameters" are created in the claimed sound recording/reproducing apparatus or already existed in the claimed digital signal processor in the connected amplifier apparatus instead. Furthermore, in line 13, the DSP program parameter acquisition step is also vague as the location of the "parameters" is not clear. For example, it is not clear whether the DSP program parameters are stored in the

Art Unit: 2627

recording/reproducing apparatus, or stored in the digital signal processor connected to an amplifier apparatus or stored in the claimed recording medium.

Similarly, regarding Claims 13 and 43-46, the designating and performing "DSP program parameters" on a digital signal processor is vague because it is not clear as whether or not the claimed "rule table" represents the "DSP program parameters". In other words, it is not clear whether the "DSP program parameters" are created in the claimed sound recording/reproducing apparatus or already existed in the claimed digital signal processor in the connected amplifier apparatus or stored in the claimed recording medium.

The claims not specifically mentioned above are indefinite based upon their dependence on the indefinite Claims.

Art Unit: 2627

Allowable Subject Matter

3. Claims 1-4, 13-16 and 43-46 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

4. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on the Amendment filed on March 2, 2010:

Regarding Claim 1, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having the following features:

(a) a rule table creation step of creating a rule table that associates the attribute information and digital signal processor (DSP) program parameters, each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field process or the frequency characteristic process being performed on a digital signal processor of a connected amplifier apparatus;

Art Unit: 2627

(b) a step of using, when a model of an amplifier apparatus that is the object of control during creation of the rule table and a model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus coincide with each other, the DSP program parameter acquired from the rule table as a DSP program parameter after completion of the acquisition process;

(c) a step of using, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, a DSP program parameter acquired from the rule table and a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from a DSP program associating table that associates DSP program parameters of a plurality of amplifier apparatuses, and using the DSP program parameter acquired from the DSP program associating table as a DSP program parameter after completion of the acquisition process; and

(d) a DSP program parameter setting step of setting the DSP program parameter after completion of the acquisition step, in the digital signal processor of the amplifier apparatus that is

Art Unit: 2627

currently connected to the sound recording/reproducing apparatus.

As in claim 13, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having the following features:

(a) a rule table creation section that creates a rule table that associates the attribute information, digital signal processor (DSP) program parameters and processing start times, each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field process or the frequency characteristic process being performed on a digital signal processor in a connected amplifier apparatus, each of the processing start times designating a time when the sound field process or the frequency characteristic process is started;

(b) a DSP program associating table associating DSP program parameters of a plurality of amplifier apparatus; a section that acquires, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing

Art Unit: 2627

apparatus, a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from the DSP program associating table, and uses the DSP program associating table as a DSP program parameter after completion of the acquisition process; and

(c) a DSP program parameter setting section that sets the DSP program parameter after completion of the acquisition process, acquired from the rule table, in the digital signal processor of the amplifier apparatus currently connected to the sound recording/reproducing apparatus.

As in claim 43, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having the following features:

(a) an attribute information recording step of recording, onto the recording medium, attribute information on sound data of a music piece that are to be recorded onto the recording medium;

(b) a rule table creation step of creating a rule table that associates the attribute information, digital signal processor (DSP) program parameters and processing start times,

Art Unit: 2627

each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field process or the frequency characteristic process being performed on a digital signal processor in a connected amplifier apparatus, each of the processing start times designating a time when the sound field process or the frequency characteristic process is started;

(c) a DSP program parameter acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from the recording medium, are to be outputted to the amplifier apparatus which is currently connected to the sound recording/reproducing apparatus, acquiring, from the rule table, any of the DSP program parameters that corresponds to the attribute information on the sound data and corresponds to any one of the processing start times that has coincided with an elapsed reproducing time of the sound data;

(d) a step of using, when the model of an amplifier apparatus that is the object of control during creation of the rule table and the model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus coincide with each other, the DSP program parameter acquired from the rule table as a DSP program parameter after completion

Art Unit: 2627

of the acquisition process;

(e) a step of acquiring, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, a DSP program parameter acquired from the rule table and a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from a DSP program associating table that associates DSP program parameters of a plurality of amplifier apparatuses, and using the DSP program parameter acquired from the DSP program associating table as a DSP program parameter after completion of the acquisition process.

As in claim 44, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having the following features:

(a) a rule table creation step of creating a rule table that associates the attribute information and digital signal processor (DSP) program parameters, each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field

Art Unit: 2627

process or the frequency characteristic process being performed on a digital signal processor in a connected amplifier apparatus;

(b) a DSP program associating table associating DSP program parameters of a plurality of amplifier apparatus; a section that acquires, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from the DSP program associating table, and uses the DSP program associating table as a DSP program parameter after completion of the acquisition process; and

(c) a DSP program parameter setting section that sets the DSP program parameter after completion of the acquisition process, acquired from the rule table, in the digital signal processor of the amplifier apparatus currently connected to the sound recording/reproducing apparatus.

As in claim 45, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a

Art Unit: 2627

recording medium and reproducing the sound data from the recording medium having the following features:

(a) a rule table creation step of creating a rule table that associates the attribute information and digital signal processor (DSP) program parameters, each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field process or the frequency characteristic process being performed on a digital signal processor in a connected amplifier apparatus;

(b) a DSP program parameter acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from the recording medium, are to be outputted to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, acquiring, from the recording medium, the attribute information on the sound data of the music piece to be reproduced and acquiring, from the rule table, any of the DSP program parameters that corresponds to the attribute information;

(c) a step of using, when a model of an amplifier apparatus that is the object of control during creation of the rule table and a model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus

Art Unit: 2627

coincide with each other, the DSP program parameter acquired from the rule table as a DSP program parameter after completion of the acquisition process; and

(d) a DSP program parameter setting step of setting the DSP program parameter after completion of the acquisition step, in the digital signal processor of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus.

As in claim 46, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method having the following features:

(a) a rule table creation section that creates a rule table that associates the attribute information, digital signal processor (DSP) program parameters and processing start times, each of the digital signal processor (DSP) program parameters designating a sound field process or a frequency characteristic process, the sound field process or the frequency characteristic process being performed on a digital signal processor in a connected amplifier apparatus, each of the processing start times designating a time when the sound field process or the frequency characteristic process is started;

(b) a DSP program parameter acquisition section step of, at a time of reproduction when sound data of a music piece to be

Art Unit: 2627

reproduced, read out from the recording medium, are to be outputted to the amplifier apparatus, acquiring, from the recording medium, the attribute information on the sound data of the music piece to be reproduced and acquiring, from the rule table, any of the DSP program parameters that corresponds to the attribute information; and

(c) a DSP program parameter setting step of setting the DSP program parameter, acquired from the rule table, in the digital signal processor of the amplifier apparatus.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

Response to Remarks

5. Applicant's Amendment and Remarks filed on March 2, 2010 have been fully considered. The amended Claims are rejected as they contain an unclear claim feature "DSP program parameters" which is inadvertently missed in the last Office Action.

Art Unit: 2627

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached on (571) 272-7579.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

/Kim-Kwok CHU/

Examiner AU2627
July 5, 2010
(571) 272-7585

/William J. Klimowicz/

Primary Examiner, Art Unit 2627